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ABSTRACT

The John Jay High School Bilingual Program served 206 New York City Spanish, French, and Italian dominant students and 98 English dominant students in grades 9-12. Non English dominant students received instruction in English as a Second Language or remedial English. English dominant students participated in the program through Hispanic Art classes. Emphasis in the bilingual program was placed on mainstreaming students to prepare them for full integration with their English dominant peers. Supportive services, home visits, parental involvement activities, and community relations programs formed additional program components. Criterion referenced tests were used to evaluate the effects of the program on student achievement. Evaluative findings indicated that (1) students mastered an average of .6 instructional objectives per month in the area of English as a Second Language, (2) Hispanic students showed significant gains in Spanish reading achievement, and (3) 40-71% of ninth, tenth, and eleventh graders achieved passing grades in mathematics. Bilingual students had average attendance rates of 76-92%. (MK)

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FINAL EVALUATION REPORT

JOHN JAY HIGH SCHOOL

BILINGUAL PROGRAM

1978-1979

ESEA TITLE VII

Project 5004- 97617

ED193404

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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FINAL EVALUATION REPORT:

JOHN JAY HIGH SCHOOL BILINGUAL PROGRAM

ESEA TITLE VII

1978-1979

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JOHN JAY HIGH SCHOOL

BILINGUAL PROGRAM 1978-1979

Location: 237 Seventh Avenue, Brooklyn, New York

Target Languages: Spanish, Italian, French/Creole

Year of Operation: 1978-1979, Fifth and Final Year

Number of Participants: 206 LEP students, 98 English-dominant students

Principal: Mr. Robert Weinberger

Program Coordinator: Mr. Thomas J. Lenihan

I. PROGRAM DESCRIPTION

Demographic Context

District 15, which John Jay High School serves has an Hispanic population of 12,705 of which 3049 are eligible for bilingual education according to the Language Assessment Battery test, and over 95 percent of which fall below Federal guidelines for poverty status. Over 75 percent of the district's students are eligible for "Free A Lunch" or "Reduced A Lunch."

The high school population is composed of approximately 1 percent Asian, 21 percent Black, 22 percent White and 45 percent Hispanic students. Of a total student body of approximately 4000, 1513 or 39 percent speak Spanish in the home. Approximately 1 percent of the student body is of limited English proficiency (LEP). Sixty-eight percent of these LEPs are Spanish-dominant, seven percent are Italian-dominant and 21 percent are French/Creole-dominant students.

As the poverty status data show, the school is located in a lower-income, predominantly working class zone, where social and economic conditions place a premium on becoming gainfully employed at the earliest possible date often at the expense of secondary and post-secondary education. As a consequence, the school's attendance rate is poor and the drop-out rate high.

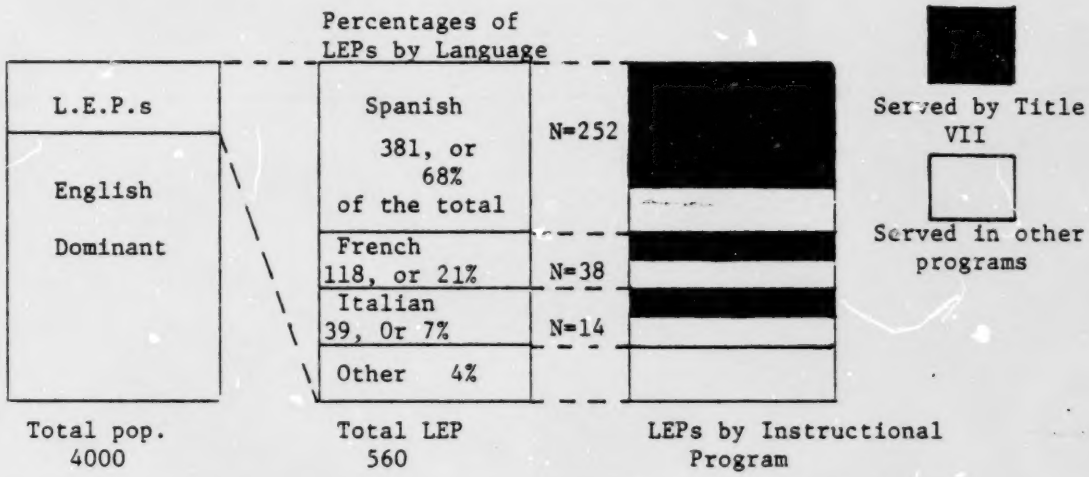
Program Participants

The target population served by the John Jay Bilingual Program during the 1978-1979 school year consisted of 206 limited English proficient students and 98 English-dominant students, making 304 in all. There were 154 Spanish, 38 French and 14 Italian dominant students in the group served by the program.

Program participants were selected on the basis of teacher recommendation and scores achieved on the Language Assessment Battery administered at the beginning of the school year. The English-dominant students who participated in the program were selected from incoming students on the basis of their interest in participating. Students of limited English language proficiences who scored above the 21st percentile on the Language Assessment Battery received English as a Second Language or remedial English, as indicated, in programs not funded by Title VII.

The bar graph below provides a graphic view of the distribution of limited English proficient students according to their participation in Title VII or other programs in the school.

CHART 1 STUDENT POPULATION
By Language Dominance *



Personnel and Administration

The Title VII program provided personnel as follows: one teacher trainer, one career advisor, a curriculum specialist, three resource teachers and one educational assistant, all working under the direction of the project director.

Additional personnel other than those funded by Title VII consisted of seven tax levy teachers, one guidance counselor, a paraprofessional and a secretary.

The project director was in charge of administration and supervision of the staff as well as coordinating program activities with the Principal and the Foreign Languages Department.

Program Goals and Objectives

The John Jay High School Bilingual Program was designed to offer bilingual instruction and supportive services for limited English proficient students of three different language groups with the objective of providing a transitional program for integration into the mainstream at the earliest possible date. The stated goals to be achieved to this end were the following:

* To effect gains in reading achievement in English;
* To effect gains in reading achievement in Spanish;
* To effect gains in achievement in mathematics;
* To improve attendance;
* To achieve cross-culturalization through stress on the humanities.

Instructional Program

In order to achieve the aforementioned goals, the bilingual program offered participants instruction in the native language in various content area courses. The number of courses offered to the different language groups varied according to the size of the respective populations being served.

Title VII funds financed curriculum development for Spanish language materials. The curriculum used for all bilingual classes was the same as that used in the rest of the school.

The table on the next page summarizes the instructional program in the native language received by each group, divided according to funding source. As can be seen, the French/Creole and Italian groups received only two and one course respectively, in the Title VII program. Native language arts courses were tax levy funded for all three language groups.

TABLE I

Instructional Program

By Language Group and Funding Source

Component	Spanish			French/Creole			Italian		
	T.VII	T.L.	N.L.	T.VII	T.L.	N.L.	T.VII	T.L.	N.L.
Native Language Arts		x	Y		x	Y		x	Y
Commercial Math	x		Y		x	N		x	N
Algebra I	x		Y		x	N		x	N
Algebra II	x		Y		x	N		x	N
General Science	x		Y		x	N	x		Y
P. Science	x		Y		x	N		x	N
Social Studies		x	N	x		Y		x	N
Art	x		Y	x		Y		x	N

T.VII = Title VII program

T.L. = Tax levy program

N.L. = Native Language used for instruction (Y= Yes; N= No)

NOTE: - All program participants received ESL instruction, funded by tax levy.

- All program participants received Physical Education instruction in English with mainstream students.
- Spanish speaking students were allowed to take Shop and Music in the Mainstream as electives, when they were prepared to do so.

All of the program participants took five to ten periods of English as a Second Language instruction per week, depending on their level of proficiency. Students considered qualified to do so by their teachers were allowed to take English Reading Laboratory.

The English-dominant students who participated in the program did so through the Hispanic Art classes which were the highlight of the transitional dimension of the program. There were two such classes, which were taught half in Spanish and half in English with a view to increasing the Spanish-dominant students' mastery of English expressive and receptive skills. The Haitian Art class was taught a third of the time each in French/Creole, Spanish and English. As can be seen from the table on page 6, the Italian-speaking students received no instruction in art in their native language.

All of the content area classes were taught five periods weekly. The Title VII Program classes were taught by one teacher per class, with the exception of the art classes. These were taught by one teacher with the assistance of one paraprofessional.

Mainstreaming

The John Jay bilingual program emphasized its transitional nature. When students were considered to be prepared to do so by their teachers, they were allowed to take various electives in the mainstream preparatory to full integration with their English-dominant peers.

Typically, students were fully mainstreamed after two years of participation in the bilingual program. The criterion for mainstreaming students was a score on or above the 21st percentile on the Language Assessment Battery.

Curriculum Development

Under funding from Title VII, the John Jay Bilingual Program developed curriculum materials appropriate to the Spanish-dominant students' native language. Materials for the other language groups, that is the French/Creole social studies class and the Italian science class, were taken from other Title VII programs.

The materials developed covered the content areas listed below:

* Ninth year mathematics (1 & 2)
* Algebra (1 & 2)
* Ninth year science
* Biology (1 & 2)
* Economics

* American History
* Latin American Studies
* World History
* Commercial Mathematics
* Geometry and Experimental Geometry
* General Science (1 & 2)

Supportive Services

Emphasis was placed on providing supportive services such as counseling and tutoring in order to combat the absenteeism characteristic of the school, and encourage completion of the high school program. Supportive services offered by the program included the following:

* Home visits
* Career counseling
* Individual and group guidance
* Follow-up and Tutoring

Home visits. Visits were made by a teacher to the homes of twenty-three students. The home visit to parents was made when students who showed a low attendance rate could not be reached by mail or telephone.

Career Counseling. The career advisor was responsible for aiding senior and junior students in selecting career options and helping them to complete the necessary job applications and reference forms. Guest speakers were also invited to the school to provide insights into the skills required and the duties involved in typical careers. Students were furthermore provided with audio tapes available at the Bilingual Resource Center, on which the main features of the most common vocations were described.

Individual and Group Guidance. All of the 304 students served by the bilingual program received guidance services. The main thrust of the guidance sessions was to place students in the appropriate grade level and provide assistance in obtaining credit for studies completed in their countries of origin. Guidance was provided in the form of one interview per semester for each official class, in addition to further individual counseling when deemed necessary by the staff.

Follow-up and Tutoring. Students who were mainstreamed continued to have the right to avail themselves of bilingual materials and counseling, as needed. Emphasis was placed however, on "leaving the nest" and becoming fully

integrated into the mainstream. Mainstreamed students were also free to make use of the teacher-run tutorials held for program students each day during the fifth and eighth periods.

Staff Development

Title VII staff development activities included the following:

* University training
* Workshops
* Meetings
* Conferences and local symposia

University training. Due to insufficient funds and high tuition costs, only three teachers were enrolled at universities during the 1978-1979 school year. Among these was the teacher trainer. Those attending universities were selected on the basis of the degree of need for increasing mastery of bilingual education methodology. They took 3 to 6 credits per semester.

Workshops. Inservice training took the form of monthly workshops attended by the entire Title VII staff. Research and discussion topics in bilingual education were presented by staff members specializing in given areas. Such topics included: administration of competency tests; use of classroom equipment; methods for fostering discussion among students; individualized learning techniques and the "Teachers' Ten Commandments". Agendas for the workshops are attached to this report.

Meetings. The entire staff participated in monthly meetings aimed at implementing suggestions for the day-to-day functioning of the program; student academic, disciplinary and performance problems, and other administrative questions.

Conferences and Symposia. The project director and members of the staff participated in yearly conferences and symposia relevant to bilingual education methodology and administration. Conferences attended included: NABE; NYSABE; American Association of Administrators; New York and National Tesol.

Parental Involvement

Parental involvement in the John Jay High School Bilingual Program consisted of meetings and advisory group activity implemented in coordination with the project director. The twelve parents who constituted the Parent Advisory Committee and were responsible for its functions did so informally, as

participants in the English as a Second Language class held for adults. The classes took place four hours in the evening per week.

Contact with parents was also maintained by one teacher who made home visits when student absenteeism warranted them.

Open school was held during the afternoon and evening once a semester. Twenty-five parents attended. Parents were also invited to participate in celebrations sponsored by the bilingual program, such as Pan American day, for which students prepared theatrical presentations.

Community Relations

Information about the bilingual program was disseminated in the community by means of the monthly newsletter Noticias produced by the students and distributed by them and through direct mailings to the parents.

The local press covered the program several times during the school year, reporting most extensively on the fact that a bilingual student served by the program became valedictorian for her graduating class after having competed successfully in the English Regents exams.

II. ASSESSMENT PROCEDURES AND FINDINGS

The following section reports the results of the testing administered to establish the effect of the program on student performance. Students were tested in the following areas:

English as a Second Language --	Criterion Referenced English Syntax Test (CREST)
Reading in Spanish --	CIA - Prueba de Lectura, Level III
Mathematics --	Teacher-made Criterion Referenced Tests
	Criterion Referenced Tests
Science --	Teacher-made Criterion Referenced Tests

In addition, information is provided on the attendance rate of students participating in the bilingual program compared with that of the mainstream population.

The results of the CREST are reported in terms of the number of students at each CREST level, average number of objectives attempted and mastered, and the number of objectives mastered per month.

Corrected t-tests were performed on standardized tests in Reading in Spanish. This analysis demonstrates whether there is a significant difference between the outcomes of testing conducted at two points in time for students with matched pre/post-test scores. It does not represent an estimate of how students would have done in the absence of the program. No such estimate could be made because norms were not available for this population and there was no appropriate comparison group.

The results of the criterion referenced tests in mathematics and science are reported in terms of the number and percent of students achieving the criterion levels set for successful completion of the course content.

TABLE II

English as a Second Language

for Spanish Speaking Students

Results of the Criterion Referenced English Syntax Test (CREST)
Reporting the Number of Objectives Mastered, Percent Mastered,
and Objectives Mastered Per Month.

Grade	# of Students	Average # of Objectives Attempted	Average # of Objectives Mastered	% Mastered/ Attempted	Average Months of Treatment	Objectives Mastered Per Month
9	15	12.0	5.1	42%	7.9	.6
10	30	10.4	5.4	52%	9.1	.6
11	40	16.2	5.4	34%	10.0	.5
12	8	9.9	3.9	39%	10.0	.4
Total	93	13.1	5.2	40%	9.3	.6

Table II is a presentation by grade of the results of the Criterion Referenced English Syntax Test (CREST) for those students who are also in a Title I funded ESL program. Overall, it indicates that students attempted mastery of an average of 13.1 reading skills but mastered an average of 5.2 of these. This represents an average of .6 objectives mastered per month. The 9th and 10th graders did slightly better (averaging .6 objectives mastered per month) than the 11th and 12th graders who mastered .5 and .4 objectives per month respectively.

TABLE III

English as a Second Language

for Spanish Speaking Students

Student Performance on the
Criterion Referenced English Syntax Test (CREST)
A Breakdown by Test Level and Grade.

		LEVEL I			LEVEL II			LEVEL III		
Grade	# of Students	Attempted	Mastered	Percent Mastered	Attempted	Mastered	Percent Mastered	Attempted	Mastered	Percent Mastered
9	15	166	69	42%	14	7	50%	-	-	-
10	30	312	162	52%	-	-		-	-	-
11	40	235	89	38%	327	93	28%	84	35	42%
12	8	37	13	35%	30	16	53%	12	2	17%
Totals	93	750	333	44%	371	116	31%	96	37	39%

Table III presents a breakdown by grade and test level of the CREST results. It indicates that Percent Mastery ranged from 31% in Level I through 39% in Level III to a high of 44% in Level I. It also shows among the 9th and 10th graders there is hardly anyone working above Level I while the majority of the skills being worked on by the 11th and 12th grade are Level II or Level III.

TABLE IV

English as a Second Language

for French / Creole Speaking Students

Results of the Criterion Referenced English Syntax Test (CREST)
Reporting the Number of Objectives Mastered, Percent Mastered,
and Objectives Mastered Per Month.

Grade	# of Students	Average # of Objectives Attempted	Average # of Objectives Mastered	% Mastered/ Attempted	Average Months of Treatment	Objectives Mastered Per Month
9	3	11.7	8.3	71%	6.7	1.3
10	1	6.0	4.0	67%	3.0	1.3
11	25	11.3	5.4	48%	9.5	.6
12	2	5.0	2.5	50%	10.0	.3
Total	31	10.7	5.5	51%	9.1	.6

Table IV is a presentation, by grade, of the results of the Criterion Referenced English Syntax Test (CREST) for students who are also in a Title I funded ESL program. It is difficult to make comparisons across grades because over 80% of the students come from the 11th grade. The overall total indicates that students represent an average of .6 objectives mastered per month, or a little more than 1 skill mastered every 2 months.

TABLE V

English as a Second Language

for French / Creole Speaking Students

Student Performance on the
Criterion Referenced English Syntax Test (CREST)
A Breakdown by Test Level and Grade.

		LEVEL I			LEVEL II			LEVEL III		
Grade	# of Students	Attempted	Mastered	Percent Mastered	Attempted	Mastered	Percent Mastered	Attempted	Mastered	Percent Mastered
9	3	35	25	71%	0	0	-	0	0	-
10	1	6	4	67%	0	0	-	0	0	-
11	25	200	87	44%	65	34	57%	17	14	82%
12	2	0	0	-	3	2	67%	7	3	43%
Total	31	241	116	48%	67	36	53%	24	17	71%

Table V gives a breakdown by grade and test level of the CREST results. Caution might be recommended in comparing the results across grades since over 80% of the students tested are from the 11th grade, the other grades having only a trickle of students represented. An overall comparison across levels indicates that the Percent Mastered progressively increases as the level becomes higher going from 44% mastered at Level I to 82 Percent Mastery at Level III.

TABLE VI

English as a Second Language

for Italian Speaking Students

Results of the Criterion Referenced English Syntax Test (CREST) Reporting the Number of Objectives Mastered, Percent Mastered, and Objective Mastered Per Month.

Grade	# of Students	Average # of Objectives Attempted	Average # of Objectives Mastered	% Mastered/ Attempted	Average Months of Treatment	Objectives Mastered Per Month
11	6	17.2	5.7	33%	10	.6
Total	6	17.2	5.7	33%	10	.6

Table VI usually gives a breakdown by grade of the results of Criterion Referenced English Syntax Test (CREST). In this case there are only 6 students to be described and all of them are 11th graders. The results, albeit small, indicate that the students attempted mastery of 17.2 reading skills objectives, of these there were 5.7 skills in which they proved mastery. This averages out to about .6 objectives mastered per month or, to put it another way, about 1 reading objective mastered every 2 months.

TABLE VII

English as a Second Language

for Italian Speaking Students

Student Performance on the
Criterion Referenced English Syntax Test (CREST)
A Breakdown by Test Level and Grade.

		LEVEL I			LEVEL II			LEVEL III		
Grade	# of Students	Attempted	Mastered	Percent Mastered	Attempted	Mastered	Percent Mastered	Attempted	Mastered	Percent Mastered
11	6	27	3	11%	66	25	38%	10	6	60%
Total	6	27	3	11%	66	25	38%	10	6	60%

Table VII gives a breakdown by grade and test level of the CREST results. In this case, there are only 6 eleventh graders to be described. An overall comparison across levels indicates that the Percent Mastered progressively increases as the level becomes higher, going from 11% mastered at Level I to 60% mastery at Level III.

TABLE VIII

Spanish Reading Achievement

Significance of Mean Total Raw Score Differences Between Pre and Post-Test Scores on the CIA-Prueba de Lectura, Level III for Students With Full Instructional Treatment.

		Pre-Test		Post-Test					
Grade	N	Mean	Standard Deviation	Mean	Standard Deviation	Mean Difference	T Test	df	Level of Significance
9th	9	50.78	25.26	76.22	30.26	25.44	4.65	8	.01
10th	34	55.94	24.74	82.32	24.42	26.38	10.93	33	.001
11th	42	59.64	24.67	78.62	24.45	18.98	7.98	41	.001
12th	17	85.41	15.98	100.24	8.69	14.82	4.12	16	.001

The preceding table summarizes the findings for grades 9 through 12 on the CIA - Prueba de Lectura, Level III. Pre-tests were administered in October, 1978, and the post-tests in May, 1979.

The findings indicate that on the average, scores for all grades increased from pre to post-testing. The mean raw score gains range from 14.82 in the twelfth grade to 26.38 in the tenth grade. These mean score gains are all significant at less than the .01 level of significance.

It can be concluded that the Program Objective of statistically significant gains in mean raw scores for Spanish Reading has been achieved.

TABLE IX

Mathematics

Comparison of Uniform Mathematics Examinations Passed Fall 1978 and Spring 1979 by Hispanic Students, Regardless of Year of Entry and Full or Partial Instructional Treatment.

	FALL 1978			SPRING 1979		
Grade	No. Taking Subject	No. Passing	% Passing	No. Taking Subject	No. Passing	% Passing
9th	12	5	42%	15	8	53%
10th	35	20	57%	29	15	52%
11th	28	20	71%	25	10	40%
12th	1	1	100%	2	2	100%

According to Table IX the number of students passing Mathematics in the Fall ranged from a low of 42% in the ninth grade to a high of 71% in the eleventh grade. During the Spring, the number of students passing Mathematics ranged from a low of 40% in the eleventh grade to a high of 52% and 53% in the tenth and ninth grades, respectively. One twelfth grade student took and passed this subject in the Fall, while two twelfth graders took and passed it in the Spring. For this reason, the twelfth grade has not been included in the interpretation.

TABLE X

Science

Comparison of Uniform Science Examinations Passed Fall 1978 and Spring 1979 by Hispanic Students Regardless of Year of Entry and Full or Partial Instructional Treatment.

	FALL 1978			SPRING 1979		
Grade	No. Taking Subject	No. Passing	% Passing	No. Taking Subject	No. Passing	% Passing
9th	10	8	80%	8	7	88%
10th	11	10	91%	7	6	86%
11th	31	24	77%	27	24	89%
12th	4	4	100%	3	3	100%

According to Table X , the number of students passing Science in the Fall ranged from a low of 77% in the eleventh grade to a high of 91% in the tenth grade. During the Spring, the number of students passing was approximately the same for the ninth, tenth and eleventh grades. The percentages were 88%, 86% and 89%, respectively. In the twelfth grade, four students took and passed this subject in the Fall, while three students took and passed in the Spring.

TABLE XI

Attendance

Attendance Rates of Bilingual Program Students Compared to the Schoolwide Attendance Rate, by Grade.

Grade	No. of Students	Average Attendance	Standard Deviation	No. Students Exceeding Criterion	% Students Exceeding Criterion
9th	16	75.99	23.71	6	38%
10th	42	79.46	27.06	26	62%
11th	53	77.43	28.36	33	62%
12th	18	91.72	10.13	16	89%

The average attendance rate per grade ranged from a low of 76% in the ninth grade to a high of 92% in the twelfth grade. The percentage of students exceeding the schoolwide attendance rate ranged from a low of 38% of the ninth graders to a high of 89% of the twelfth graders.

III. SUMMARY OF FINDINGS

In the area of English as a Second Language, as measured by the CREST, students from all linguistic backgrounds mastered an average of .6 instructional objectives per month, with a tendency to master objectives more slowly as the grade level (and the instructional level) increased. Because objectives become more difficult as the level of instruction increases, the students tended to master a smaller percentage of the objectives they attempted as their grade level increased.

Hispanic students tested with the Prueba de Lectura all showed significant gains in reading achievement in Spanish.

On uniform examinations in mathematics, 40% to 71% of the ninth, tenth and eleventh grade Hispanic students achieved passing grades (excluding the 3 twelfth graders who passed examinations in mathematics).

On uniform examinations in science, bilingual students achieved rates of passing which ranged from 77% to 100%.

In attendance, the groups of bilingual students had average attendance rates which ranged from 75.99 to 91.72%. There was a tendency for attendance rates to improve with grade level. While only 38% of the ninth graders had attendance rates which exceeded the rate for the total school, 62% of the tenth and eleventh grades exceeded the school-wide rate, and 89% of the twelfth graders did so. As a whole, bilingual students appear to have met the program-set criterion for attendance.